Keevil CofE Academy Computing Curriculum Overview

	EYFS/KS1	Lower KS2	Upper KS2
Year 1	 Programming (Beebots; code.org Course I) What happens if I press this? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs use logical reasoning to predict the behaviour of simple programs E-safety How do we keep ourselves safe on-line? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online 	Programming (code.org Course II,) How do we instruct computers? design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs E-safety Why do I need to think about how I behave on-line? use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Programming (code.org Course III, Micro: bit) How can I use programming to solve problems? design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs E-safety How can I keep myself and others safe on-line? use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
	 Concerns about content or contact on the internet or other online technologies. Digital Literacy (Word Processing) What is technology used for? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school 	Digital Literacy (Publisher; PowerPoint) How can I use computers to help me learn in different subjects? • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Digital Literacy (Sharing Research and Documents) How can I use technology to improve how we find and share information? • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
	 Creativity/Graphics (Digital Painting; Photography) Can you paint a picture without using paint? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school 	Creativity/Graphics (Images and Animation) How can we edit and improve our images? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Creativity/Graphics (Film Making) How can we become film makers? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

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Year 2	 Programming (Beebots; Junior Scratch) How can we move the character without picking it up? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs use logical reasoning to predict the behaviour of simple programs E-safety When should I ask for help when I'm on-line? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have 	Programming (Scratch) What key skills do I need to program successfully? design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs E-safety What can I do if I am worried about something on-line? use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Programming (Scratch) How is programming useful? design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs E-safety How can I use technology responsibly? use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
	concerns about content or contact on the internet or other online technologies. Digital Literacy (Data Handling – Pictograms) How can I use computers to help my work in other lessons? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school	Digital Literacy (Data Handling – Spreadsheets) How can IT help with maths and science? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Digital Literacy (Word Processing; Publisher; Powerpoint) How can technology help us in other areas? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
	 Creativity/Graphics (Digital Painting; Photography) How can we use a computer to create art? Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school 	Creativity/Graphics (AI, Publisher, Animation) How can I use a computer program to present information? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Creativity/Graphics (Al,Images and Animation) How can I use a computer to change images? understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information